

REMARKS

I. Co-Pending Related Applications

Applicants respectfully request the Examiner to review the claims and the prosecution history, including any Office Actions issued by the U.S. Patent and Trademark Office and any responses filed by Applicants, for Serial No. 10/410,736, filed April 10, 2003; Serial No. 11/006,935, filed December 8, 2004; Serial No. 11/252,160, filed October 17, 2005; Serial No. 11/331,806, filed January 13, 2006; and Serial No. 11/607,340, filed November 30, 2006.

II. Allowable Subject Matter

Applicants appreciate the Office Action's indication that claims 16-23 are allowed. Applicants also appreciate the Office Action's indication that claims 2-8, 10, 15, 26, 36, and 37 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

III. Interview Summary

Applicants appreciate the courtesy Examiner Abebe extended to Assignee's representative during the telephone interview on March 26, 2010. Claim 1, claim 24, claim 27, Dickel (U.S. Pat. App. Pub. No. 2002/0037088), and Ivo de Roo (U.S. Pat. App. Pub. No. 2007/0019835) were discussed. During the interview, the Examiner agreed that an addition of the following language to claim 1 would overcome the rejection of claim 1 in view of Dickel and Ivo de Roo: "where the first noise detector is adapted to identify whether the input signal contains the wind buffet based on a correlation between the line and the portion of the input signal." Applicants appreciate this agreement and have amended claim 1 accordingly.

IV. Section 103 Claim Rejections: Claims 1, 9, 11-14, and 28-35

Claims 1, 9, and 11-14

Claim 1 is directed to a system for suppressing wind noise. The system includes a noise detector that is adapted to detect a wind buffet from an input signal by deriving and analyzing an average wind buffet model comprising attributes of a line fit to a portion of the input signal. The first noise detector is adapted to identify whether the input signal contains the wind buffet based on a correlation between the line and the portion of the input signal.

The proposed combination of Dickel and Ivo de Roo discloses a system for detecting wind noises. The Office Action notes that "Dickel doesn't explicitly teach modeling wind

noise.” *See* Office Action at page 3. Therefore, the Office Action relies on Ivo de Roo as allegedly disclosing the claimed feature of detecting a wind buffet from an input signal by deriving and analyzing an average wind buffet model comprising attributes of a line fit to a portion of the input signal. However, as agreed upon during the March 26, 2010 interview, the proposed combination does not disclose a noise detector that is adapted to detect a wind buffet from an input signal by deriving and analyzing an average wind buffet model comprising attributes of a line fit to a portion of the input signal, where the first noise detector is adapted to identify whether the input signal contains the wind buffet based on a correlation between the line and the portion of the input signal. Therefore, Applicants respectfully request withdrawal of this rejection.

Claims 28-35

Claim 28 is directed to computer readable memory comprising software that controls a detection of a noise associated with a wind. The computer readable memory comprises a signal analysis logic that models a portion of sound waves that are associated with the wind to detect a wind buffet in an input signal by deriving and analyzing an average wind buffet model comprising attributes of a line fit to a portion of the input signal. The signal analysis logic identifies whether the input signal contains the wind buffet based on a correlation between the line and the portion of the input signal. Claim 28 is allowable for the same reasons as discussed above in connection with claim 1. Therefore, Applicants respectfully request the withdrawal of this rejection.

V. Section 103 Claim Rejections: Claims 24, 25, and 27

Claims 24, 25, and 27 are directed to methods of dampening or removing a wind buffet from an input signal. The methods include fitting a line to a portion of the input signal, and detecting the wind buffet when a high correlation exists between the line and the portion of the input signal.

Dickel discloses “a method for operating a hearing aid or hearing aid system, and a hearing aid or hearing aid system, wherein the comfort in wearing the hearing aid or hearing aid system in windy surroundings is improved.” *See* paragraph 7. “[T]wo microphones are provided in the hearing aid arrangement, and wherein respective signals from the microphones are analyzed to detect whether wind noises are present.” *See* paragraph 8. “[O]ne or more measures for reducing the wind noises are activated automatically if wind noises are detected.” *See* paragraph 8.

In order to detect wind noise, Dickel recognizes that “wind noises are generated chiefly by instances of turbulence at the microphone openings. The microphone signals caused by wind of a number of microphones therefore are uncorrelated to a high degree.” *See* paragraph 10. “[I]n order to determine the correlation of microphone signals of different microphones, the microphone signals are subtracted from one another.” *See* paragraph 11. “The higher the degree of correlation between the microphone signals, the lower the result of the subtraction will be, on average.” *See* paragraph 11. “In order to decide whether the microphone signals constitute wind noises, the result of the subtraction, preferably after smoothing, is compared with a threshold value.” *See* paragraph 11. “If the smoothed signal overshoots the threshold value, wind noises are deemed to be present.” *See* paragraph 11. “If the threshold value is not reached, there is no need for measures to reduce wind noises.” *See* paragraph 11.

The cited portions of Dickel do not disclose fitting a line to a portion of the input signal, and detecting the wind buffet when a high correlation exists between the line and the portion of the input signal. Even if, for the sake of argument, one of Dickel’s microphone signals could be the claimed “input signal” and the other of Dickel’s microphone signals could be the claimed “line,” Dickel’s wind noise detection system would determine that **no** wind noise is present in the microphone signals when a high correlation exists between Dickel’s two microphone signals. *See* paragraphs 10-11. Instead, Dickel detects wind noise based on the assumption that “[t]he microphone signals caused by wind of a number of microphones therefore are **uncorrelated** to a high degree.” *See* paragraph 10 (emphasis added). Therefore, Applicants respectfully request the withdrawal of this rejection.

CONCLUSION

In view of the amendments and remarks above, Applicants respectfully submit that the claims are in condition for allowance, and respectfully request a Notice of Allowance. If any issues remain, Applicants request that the Examiner call the undersigned attorney to expedite the prosecution of this application.

Respectfully submitted,

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